



NATIONAL SCIENCE FOUNDATION

Notice of Intent to Seek Approval to Establish an Information Collection System

AGENCY: National Science Foundation.

ACTION: Notice and request for comments.

SUMMARY: Under the Paperwork Reduction Act of 1995, and as part of its continuing effort to reduce paperwork and respondent burden, the National Science Foundation (NSF) is inviting the general public or other Federal agencies to comment on this proposed continuing information collection.

DATES: Written comments on this notice must be received by [INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER], to be assured consideration. Comments received after that date will be considered to the extent practicable. Send comments to address below.

FOR FURTHER INFORMATION CONTACT: Suzanne H. Plimpton, Reports Clearance Officer, National Science Foundation, 2415 Eisenhower Avenue, Suite W18200, Alexandria, Virginia 22314; telephone (703) 292-7556; or send e-mail to splimpto@nsf.gov. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339, which is accessible 24 hours a day, 7 days a week, 365 days a year (including federal holidays).

COMMENTS: Comments are invited on: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Foundation, including whether the information will have practical utility; (b) the accuracy of the Foundation's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information

to be collected; and (d) ways to minimize the burden of the collection of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology.

SUPPLEMENTARY INFORMATION:

TITLE of COLLECTION: Program Monitoring Data Collections for the National Science Foundation (NSF) Innovation Corps (I-Corps) Program

OMB Number: 3145-NEW.

Expiration Date of Approval: Not applicable.

Type of Request: Intent to seek approval to establish an information collection for post-award output and outcome monitoring system.

Abstract: The National Science Foundation (NSF) Innovation Corps (I-Corps) Program was started in 2011 to develop and nurture a national innovation ecosystem built upon fundamental research that guides the output of scientific and engineering discoveries closer to the development of technologies, products, and services that benefit society.

The goal of the I-Corps Program is to use experiential education to help entrepreneurial researchers reduce the time necessary to translate promising ideas from the laboratory bench to widespread implementation. In addition to accelerating technology translation, the NSF I-Corps program also seeks to reduce the risk associated with technology development conducted without insight into industry requirements and challenges.

The NSF I-Corps Program is designed to support the commercialization of "deep technologies," those revolving around fundamental discoveries in science and engineering. The program addresses the skill and knowledge gaps associated with the transformation of basic research into deep technology ventures. The program enables entrepreneurial researchers in deep

technologies to receive support in the form of entrepreneurial education, industry mentoring, and funding to accelerate the translation of knowledge derived from fundamental research into emerging products and services that may attract subsequent third-party funding. I-Corps training and infrastructure together represent an important investment for NSF and the Nation, as directed by the American Innovation and Competitiveness Act (AICA), Public Law 114-329, Section 601.

These selected researchers form teams and participate in the I-Corps Teams Program Curriculum. An I-Corps team includes the Entrepreneurial Lead (EL), Technical Lead (TL) or the Principal Investigator (PI), and the Industrial Mentor (IM). During the training program, the team is expected to spend significant time conducting active customer discovery, including interviewing potential customers and potential partners. The outcomes of I-Corps Teams projects will be threefold: 1) a decision on a clear path forward based on an assessment of the business model, 2) substantial first-hand evidence for or against product-market fit, with the identification of customer segments and corresponding value propositions, and 3) a narrative of a compelling technology demonstration for potential partners.

The NSF I-Corps program requests the Office of Management and Budget (OMB) approval of this clearance that will allow the programs to improve the rigor of our surveys for evaluations and program monitoring, as well as to initiate new data collections to monitor the immediate, intermediate, and long-term outcomes of our investments by periodically surveying the I-Corps teams and their members. The clearance will allow the program to rigorously develop, test, and implement survey instruments and methodologies.

The primary objective of this clearance is to allow the NSF I-Corps program to collect characteristics, inputs, outputs, and outcomes information from the I-Corps teams funded by the program. This collection will enable the evaluation of the impacts on the four themes as outlined in the FY 2021 NSF I-Corps biennial report to Congress:

1. Training an Entrepreneurial Workforce
2. Translating Technologies
3. Nurturing an Innovation Ecosystem
4. Enabling Economic Impact

The second, related objective is to improve our questionnaires and/or data collection procedures through pilot tests and other survey methods used in these activities. Under this clearance a variety of surveys could be pre-tested, modified, and used.

Following standard OMB requirements, NSF will submit to OMB an individual request for each survey project we undertake under this clearance. NSF will request OMB approval in advance and provide OMB with a copy of the questionnaire and materials describing the project.

Data collected will be used for planning, management, evaluation, and audit purposes. Summaries of output and outcome monitoring data are used to respond to queries from Congress, the public, NSF's external merit reviewers who serve as advisors, including Committees of Visitors (COVs), NSF's Office of the Inspector General, and other pertinent stakeholders. These data are needed for effective administration, program monitoring, evaluation, outreach/marketing roadmaps, and for strategic reviews and measuring attainment of NSF's program and strategic goals, as identified by the

President's Accountable Government Initiative, the Government Performance and Results Act Modernization Act of 2010, Evidence-Based Policymaking Act of 2018, and NSF's Strategic Plan.

All questions asked in the data collection are questions that are NOT included in the annual, final or outcomes reports, and the intention is to ask the grantees even beyond the period of performance on voluntary basis in order to capture impacts of the research that occur during and beyond the life of the award.

Grantees will be invited to submit information on a periodic basis to support the management of the NSF I-Corps investment portfolio. Once the survey tool is tested, grantees will be invited to submit these indicators to NSF via data collection methods that include, but are not limited to, online surveys, interviews, focus groups, phone interviews, etc. These indicators are both quantitative and descriptive and may include, for example, the characteristics of project personnel, sources of funding and support, knowledge transfer and technology translation activities, patents, licenses, publications, descriptions of significant advances, and other outcomes of the funded efforts.

Use of the Information:

The data collected will be used for NSF internal and external reports, historical data, program level studies and evaluations, and for securing future funding for the maintenance and growth of the NSF I-Corps program. Evaluation designs could make use of metadata associated with the award and other characteristics to identify a comparison group to evaluate the impact of the program funding and other relevant research questions.

Estimate of Public Burden:

Collection Title	No. of Respondents	Annual No. of Responses/ Respondent	Annual Hour Burden
Program Monitoring Data Collections for the National Science Foundation (NSF) Innovation Corps (I-Corps) Program	400 I-Corps teams (1,200 members) per year	3	900

For life-of-award monitoring, the data collection burden to awardees will be limited to no more than 15 minutes of the respondents' time in each instance.

Respondents:

The respondents are consisted of Technical Lead (TL) of the I-Corps Project or Principal Investigator (PI) of NSF I-Corps Program awards, Entrepreneurial Lead (EL), and Industry Mentor (IM).

Estimates of Annualized Cost to Respondents for the Hour Burdens

The overall annualized cost to the respondents is estimated to be \$30,000.

The following table shows the annualized estimate of costs to PIs or TLs/ ELs/ IMs respondents.

The annualized estimate of cost to both the PIs/TLs and IMs, who are generally University Professors, is calculated using the hourly rate based on a report from the American Association of University Professors, "Annual Report on

the Economic Status of the Profession, 2020-21,” *Academe*, March–April 2021, Survey Report Table 1. According to this report, the average salary of an assistant professor across all types of doctoral-granting institutions (public, private-independent, religiously affiliated) was \$91,408. When divided by the number of standard annual work hours (2,080), this calculates to approximately \$44 per hour. Similarly, the annualized estimate of costs to the ELs, who are generally graduate students, can be calculated using the data published in the 2017 *Science* magazine article that a typical annual stipend for graduate students in the sciences is around \$25,000. When divided by the number of standard annual work hours (2,080), this calculates to approximately \$12 per hour.

Respondent Type	No. of Respondents	Burden Hours Per Respondent	Average Hourly Rate	Estimated Annual Cost
PIs	400	0.75	\$44	\$13,200
ELs/TLs	400	0.75	\$12	\$3,600
Industry Mentors	400	0.75	\$44	\$13,200
Total	1200			\$30,000

Estimated Number of Responses per Report:

Data collections involve all awardees in the programs.

Dated: January 28, 2022.

Suzanne H. Plimpton,
Reports Clearance Officer,
National Science Foundation.

[FR Doc. 2022-02160 Filed: 2/1/2022 8:45 am; Publication Date: 2/2/2022]